

DETAILED ACTION

Election/Restrictions

Claims 39, 40 and 42-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **ALTENBOKUM (US 4,106,366)** in view of **GROSSEAU et al. (US 3,605,522)**.

Regarding claim 22-24 and 26: **ALTENBOKUM** shows a planetary gearset comprising: a rotating element (6) which is one element from among a sun gear (1), a ring gear (3), and a carrier (6) that rotatably retains a plurality of pinion gears (2) arranged between the sun gear and the ring gear, and which transmits torque between said rotating element and an external member (not shown); and a fixed element (3) which is one element from among the sun gear, the ring gear, and the carrier, said fixed element being an element other than the rotating element (6), which is retained so as to be able to move without rotation in a predetermined radial direction of a load from the transmission of torque between the rotating element and the external member (see **ALTENBOKUM** abstract), and which is constructed such that the load from the transmission of torque between the rotating element and the external member is

Art Unit: 3681

received by a fixed portion (18) that rotatably retains that rotating element. The fixed portion (18) of **ALTENBOKUM** is a part of the housing (9), and the rotating element (6) is mounted in a journal (8) within the housing (9). **ALTENBOKUM** goes on to show the fixed element (3) is retained by coupling means in a form of a grooved spline (10, 11) such that said fixed element is allowed to move without rotation in said predetermined radial direction parallelly to said load, and wherein this radial movement is allowed to such extent that said load is received through a reaction force of a same size as the load by said fixed portion. **ALTENBOKUM** also shows a permanent gap (@ 8) adjacent to said rotating element configured to allow the rotating element to rotate, and a grooved spline provided between said fixed element and a casing configured to allow the fixed element to move without rotation in said predetermined radial direction.

ALTENBOKUM does not show the external member being provided eccentric with respect to the rotating element.

GROSSEAU shows a planetary gear set in Fig. 1 having an external member (d') provided eccentric with respect to the rotating element (c).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **ALTENBOKUM** such that an external member would be provided eccentric with respect to the rotating element in view of **GROSSEAU** to provide a more compact driving arrangement.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over **ALTENBOKUM (US 4,106,366)** in view of **GROSSEAU et al. (US 3,605,522)** as

applied to claims 22-24 and 26 above, and further in view of **HORIKIRI et al. (US 4,096,769)**.

Regarding claim 27: ALTENBOKUM in view of **GROSSEAU**, as discussed in the rejection above discloses a planetary gearset having a fixed element (3) retained on a fixed portion (18) by a member (12).

The combination of **ALTENBOKUM** in view of **GROSSEAU** does not teach the member being elastic.

HORIKIRI shows in Fig. 5, a fixed element (7) of a planetary gearset retained on a fixed portion (13) by an elastic member (15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of **ALTENBOKUM** in view of **GROSSEAU** such that the fixed element would be retained on the fixed portion by an elastic member in view of **HORIKIRI** in order to ensure even engagement of all planet gears with the ring gear and sun gear for uniform distribution of the load among the planets (**HORIKIRI**, col. 1, ln. 26-30).

Allowable Subject Matter

Claims 28-30 are allowed.

Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed February 11, 2008 have been fully considered but they are not persuasive. Applicant argues that the prior art reference ALTENBOKUM, does not disclose a "fixed portion that rotatably retains [the] rotating element". Examiner does not find this to be the case. The fixed portion (18) of ALTENBOKUM is a part of the housing (9), and the rotating element (6) is mounted in a journal (8) within the housing (9). Therefore the fixed portion (18), which is synonymous with the housing (9), rotatably retains the rotating element (6). Applicant also argues that ALTENBOKUM does not disclose the external member of claim 22. It is clear that the drive shaft (16) of ALTENBOKUM is rotated by an external means, and the reference states "planetary gears are frequently used for the drive of...mobile power plants."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK D. KNIGHT whose telephone number is (571)272-7951. The examiner can normally be reached on Mon - Thurs & every other Friday, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. D. K./
Examiner, Art Unit 3681

/CHARLES A. MARMOR/
Supervisory Patent Examiner, Art
Unit 3681